



Figure 6.6. Fernández-Morán's negative-stained micrograph of cristae showing small spherical particles attached to the membrane. Reproduced from H. Fernández-Morán et al. (1964), A macromolecular repeating unit of mitochondrial structure and function: Correlated electron microscopic and biochemical studies of isolated mitochondria and submitochondrial particles of beef heart muscle, *Journal of Cell Biology*, 22, 63–100, Figures 6 and 7, p. 73 by copyright permission of the Rockefeller University Press.

such as phosphotungstate or uranyl acetate that are electron dense but chemically inert. These substances do not react with membrane material, which then appears light against the dark background created by the electron dense material. Using this approach, Fernández-Morán discovered small particles (70–90 Å in size) located on stalks about 50 Å in length projecting from the